Genoa National Fish Hatchery News and Notes

December 2016

About Genoa NFH

Genoa NFH was established over 80 years ago by the Upper Mississippi River Fish and Wildlife Act. The mission of the hatchery has changed from providing sport fish for area waters to a conservation hatchery concerned with the recovery of endangered aquatic species.

The hatchery is open for tours during business hours. For large groups, please call for an appointment. You can reach the hatchery at 608-689-2605 from 7:30 am to 3:30 pm. You can also find us online at: fws.gov/midwest/genoa

And on Facebook at: facebook.com/GenoaNFH

Cold Noses and Hot Cocoa!

Proud fisherman from last year's event

Genoa National Fish Hatchery is getting ready for their 9th Annual Kid's Ice Fishing Event, to be held at the hatchery on February 4th, 2017. This event started in 2008 and was originally held at Goose Island Park in Shelby, Wisconsin. The hatchery partnered with the local county park to hold the event, using one of the frozen backwaters as the location and was attended by over 90 adults and children. In 2009, the event was moved to the hatchery grounds, freezing over one of the ponds. Word spread quickly and the event doubled in size that year! Each year the hatchery crew, staff from the Midwest Fisheries Center, the Friends of the Upper Mississippi and volunteers collaborate to ensure this event is a huge success. It provides a safe place for parents to bring their children to introduce them to ice fishing and for many of those parents, it is their first time on the ice for fishing as well. The hatchery provides the fishing poles and the bait for two reasons: to keep the biosecurity intact, preventing outside fish or possible disease introductions that could affect the hatchery's stocking program and to ensure that anyone who wishes to learn how to fish has the needed equipment to give it a try. To ease the chill and to warm fingers and noses, a warming tent is set up with hot cocoa and in addition, the Friends Group provides a light lunch of hot dogs, chips and a dessert. The day starts with registration around 8:30am, quick presentations learning about ice safety as well as fishing techniques around 9am, and then the crowd is given their fishing limits and turned loose on the ice! This event has grown by word of mouth each year and last year over 600 parents and children showed up to try their hand at fishing. More information can be found on the event link on the hatchery's Facebook page: https://www.facebook.com/events/698164363686790/ By Angela Baran

Harvesting fish to stock in the ice fishing pond

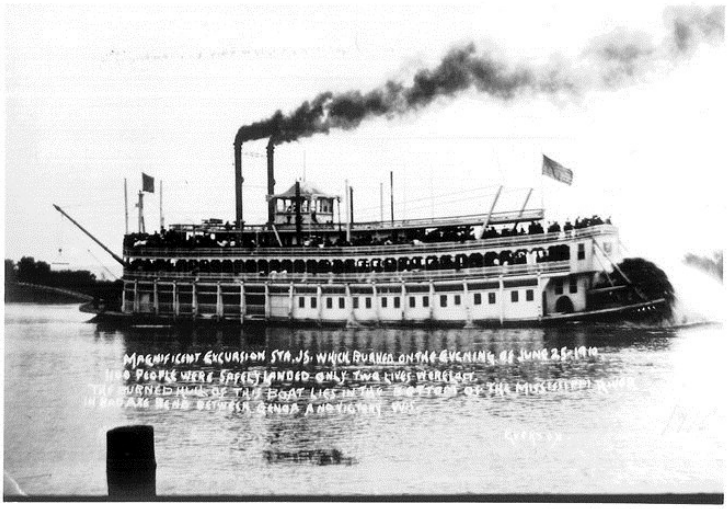
The Final Shipment of Mussels for Ohio River Restoration Project

For several years Genoa NFH has been part of the technical committee, and an active participant in restoration, for the Ohio River Natural Resource Damage Assessment and Restoration (NRDA) project #0237. The project aimed to recover freshwater mussels and snails after a chemical spill caused a widespread mortality event in the main stem of the Ohio River near Parkersburg, West Virginia. Being over 900 miles away from the footprint of the project created logistic issues, but with some creative thinking from hatchery staff and the rest of the technical committee we were able to fill a role in the project. For the last six years we have received gravid female mussels collected by divers in the Ohio River. Those animals were sent in insulated coolers via overnight mail. Upon arrival at Genoa NFH the mussel larvae were placed on the appropriate host fish and transformed into juveniles. The resulting juveniles, and adult mussels, were then returned to partners in the Ohio River Basin for culture to a size suitable for stocking. The main reason we were able to take part in the project is that we had access to freshwater drum, a fish that is difficult to collect and use from the wild in sufficient numbers. Three separate partners (Gavins Point NFH, North Platte SFH and Langston University) provided us with good numbers of young freshwater drum over the course of the project. We also utilized walleye and channel catfish from Genoa NFH to produce two additional mussel species. There were many bumps along the way and lessons learned, but in the end we propagated and shipped four mussel species (butterfly, pink heelsplitter, black sandshell and washboard), sending a total of 207,727 juvenile mussels for extended culture to partners at White Sulphur Springs NFH, the Columbus Zoo and Aquarium, Missouri State University and the West Virginia DNR. 2016 was the final year of propagation for the project with monitoring taking over from now on to determine the success of our efforts. It was exciting to participate in the restoration of a mussel bed over 900 miles away, but for now we'll be focusing on efforts a bit closer to home. By Nathan Eckert

One of the washboard used for propagation in 2016

Genoa National Fish Hatchery's mission is to recover, restore, maintain and enhance fish and aquatic resources on a basin-wide and national level by producing over 35 aquatic species of varying life stages, participating in active conservation efforts with our partners, and becoming a positive force in the community by educating future generations on the benefits of conservation stewardship

A Bit of Local History is Unearthed at Genoa



J.S steamboat before engulfed in flames

One of the great things about being located in a small community (where everyone knows your name), is that good people are always interested in the programs and activities of the local community, including our station. One of the big interests currently is the Great River Road Interpretive Center that is being constructed this winter at the Genoa hatchery. Even though the project seems to be taking a long time to complete, many people still mention that they are very anxious to see the completed project. Others, hearing that there will be a local history exhibit in the building, have also volunteered sources and other historical items of local interest to be included in the project. Historians and local authors have also reached out to share their wealth of knowledge in order to interpret the breadth of history that we are blessed with in the local area. One such historian, William Burke, stopped in to check on how the building was coming along. He also passed along a very interesting piece of history that we were unaware of. In 1910, a paddlewheel steamboat that was used as a touring/excursion boat caught fire and sank just outside the hatchery exterior dikes. The steamboat J.S. was returning from LaCrosse to its destination of Lansing Iowa on June 25th, 1910 with over 1000 passengers. The ship departed at 6 p.m. from LaCrosse, and was almost directly adjacent to Bad Axe Island when fire broke out. This location is just south of the hatchery exterior dikes. After some quick thinking by the captain and crew, the boat made shore on Bad Axe Island to offload its passengers. Most made it off by the gangplank; however about 2-300 passengers had to jump in the river from the upper deck as the first deck was totally engulfed in flames. The evacuation resulted in at least one tragic death, a young married woman that was pregnant with the couple's first child. The only other casualty was a male passenger that purportedly was under arrest for drunkenness in the hold, and may have allegedly been responsible for starting the blaze by careless smoking. Once the passengers disembarked, the captain and a skeleton crew directed the burning ship back into the channel to get it away from the passengers on the island and it floated directly downstream and sunk burning to the waterline. Passengers spent the better part of the night marooned on Bad Axe Island, being rescued by local boats that wrapped up the rescue mission by 3:30 a.m. that morning. We are looking forward to telling this story as part of local history very soon when the Interpretive Center makes its grand opening. By Doug Aloisi

Aftermath of the devastating fire

Salvage crew working on the sunken J.S steamboat

Connecting Children with Nature

Students from Southern Bluffs Elementary, Summit Environmental and Lincoln Middle Schools (LaCrosse WI) spent the day trading in textbooks for hands on learning at the Genoa National Fish Hatchery. The hatchery partners with Southern Bluffs, Lincoln and Summit schools to support their mission of providing students with a solid educational foundation in the core academic areas with an environmental focus integrated throughout the curriculum. This directly correlates to the U.S. Fish and Wildlife Service's connecting children with nature initiative. Genoa collaborates directly with teaches to match activities at the hatchery with corresponding class work. Students visit the hatchery in fall, winter and spring each year as part of the outdoor classroom and Genoa staff members also visit the classroom for in class lessons. In class lessons consist of native fish identification, fish anatomy, native freshwater mussels and monarch restoration and habitat enhancement. Document cameras and projection screens allowed students to see first-hand the internal and external anatomy of these species. During the first session of outdoor classroom students experience hands on learning activities based off of lessons in the classroom. In the fall students tour the hatchery and learn about the importance of aquatic resource management and the role the hatchery plays in sustaining and recovering fish and mussel populations. In winter students learn about animal tracks, furs, and experience the history and sport of trapping and importance of trapping as an effective management tool. Students also grow milkweed in the classroom over the winter months for planting on hatchery grounds in the spring. During spring session the students will have a tour of the hatchery to see how the fish have grown overwinter. This allows students to observe different species of fish and life stages from eggs through adults. The students end their day with a lesson on prairie restoration and the ecological benefits of prairies to many species of animals. In addition students plant milkweed that was grown over the winter in the classroom. These hands on experiences trap memories and instill conservation in the minds of these future stewards of our natural resources. In addition to these programs the hatchery offers a magnificent spot to sight see and gain valuable information about fish hatchery operations and restoration efforts. The hatchery accommodates many onsite and offsite tours throughout the year and host two onsite fishing clinics. In 2016 the hatchery hosted 65 events on station and 21 events off station with 13,259 children and adults in attendance. By Orey Eckes

In class lesson on fish anatomy (Orey Eckes)

Outdoor Classroom planting Milkweed

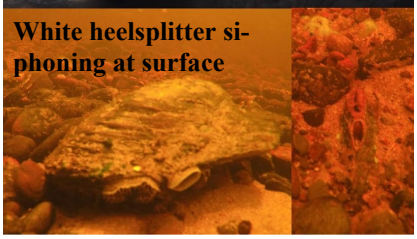
Practicing animal track ID

Trapping lessons

The Shutter Closes on 2016: Field Photo Highlights from the Mussel Program

December's always a good time to look back at the past year; before planning for the year ahead. Freshwater mussel biologists are no different, we spend our time looking back to see what went well, what needs a tweak and what goes on the 'let's not try that again' lists. Best of all are the photos from the year because they capture the big and the small moments. This year was a special one because Genoa acquired a new mussel biologist, Megan Bradley, and we bought a GoPro camera, one that will safely weather a dive in the Mississippi or an hour or two on the deck of the mussel boat. We've also got a jump on the year and already produced more than 50,000 endangered Winged mapleleaf mussel juveniles and have a system full of mussels ready to grow out for the summer.

Divers completing quadrats in Chippewa River



White heelsplitter siphoning at surface

Mucket burrowed into substrate with siphons visible (right side)

Take a minute and enjoy the photos that tell the other story of our year in the field. In July the mussel team met up with colleagues from other field offices and the Wisconsin DNR and checked on the status of Sheepnose mussels on the Chippewa River. The water was flowing fast but it's a beautiful, wild stretch of river.

In mid-August the two GNFH mussel biologists along with several other FWS divers, took dive rescue training, to improve their ability to respond if there were an accident in the field. Training culminated in a day of diving in Lake Wazee, a very deep quarry near Black River Falls, Wisconsin. The divers had a chance to let down their hair after hours of towing fellow divers and hauling gear and appreciate the biology of the quarry.

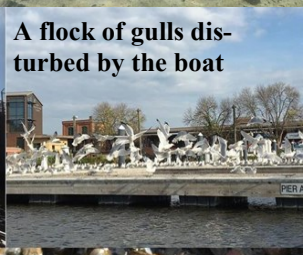
October was a busy month of field work for mussels and thankfully was a month of beautiful weather. Two days were spent in Dubuque, Iowa at the Mississippi River museum collecting mussels that grew in cages there for the summer. At this site, biologists boat in from a ramp upstream and use the boat as a floating platform for processing mussels. In addition to the mussels raised here, plenty of other wildlife abounds on the river, even in the busiest ports. By Megan Bradley

U.S. FWS Region 3 dive team members after rescue diver course

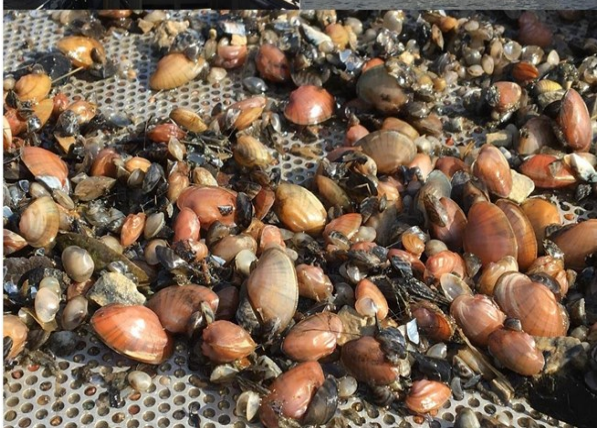
Young of year bass gathered around dive platform rail

Largemouth bass on quarry shelf.

Driving the mussel boat to the Mississippi River Museum



A flock of gulls disturbed by the boat



Plain pocketbook sieved from their summer home in the cages.

Update on Great Lakes Programs at Genoa NFH

Staff from the Jordan River and Iron River National Fish Hatcheries (NFH) and Alpena Fish and Wildlife Conservation Office (FWCO) were out on Lake Huron, near the Les Cheneaux Islands collecting cisco (*Coregonus artedi)* eggs for current restoration initiatives taking place within the U.S. Fish and Wildlife Service. The eggs arrived on station in mid-November and were incubated until hatching began in early January. The hatching of this species at Genoa NFH marks a historical event at the station as it is the first time these fish are being raised here, and the first time that they have been raised at a federal facility since the early 1900's. As the eggs began to hatch an equal number of eggs from each pair of spawned adults were separated into distinct lots of fish that will makeup future broodstock to be used in helping to restore this species. The importance of this fish species lies primarily in its role as a native prey species for the Great Lakes systems. Restoring the numbers of native ciscos helps to balance the native food-web structure and function. Native prey species such as ciscos were hindered by the introduction of invasive species, habitat degradation, and commercial harvest. Once passing a series of three fish health certifications they will be transferred to Jordan River NFH in Michigan, once there they will serve as a captive broodstock for recovery efforts. In a continuing effort to reestablish native prey species in the Great Lakes system Genoa NFH will be partnering again with Jordan River NFH, Iron River NFH, Alpena FWCO, and the Green Bay FWCO to collect bloater chubs. Bloater chubs (*Coregonus hoyi*) are a member of the whitefish family and are also an important part of the prey fish community in the Great Lakes and serve an important role in many predator-prey relationships. Bloater chubs have experienced a decline in the Great Lakes due to commercial fishing, habitat degradation and an invasion of non-native species such as invasive plankton, alewife, and zebra and quagga mussels. Because of these invasive species many of the native aquatic species in the Great Lakes are negatively affected. These species like all invasive species tend to quickly establish themselves and soon become a fierce competitor for food and niche space for native species. A top priority with Great Lakes managers has been to recover native species to provide a better balance in food-web structure and function. The new quarantine systems at Genoa NFH will serve an extremely important role in developing future captive broodstocks for both of these native species. The station needs a safely contained area to develop these key species as well as provide opportunities to research and learn about these fish. The knowledge gained from the captive care of these fish will help the U.S. Fish and Wildlife service better manage and reach its goals of developing and maintaining Great Lakes fisheries from the bottom up. Keep watch for more updates on how the programs are progressing. By Aaron Von Eschen

'Eyed up' cisco eggs almost ready to hatch

Newly hatched cisco fry at Genoa

After trawling, eggs are collected from ripe females

Upcoming calendar of events

February 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3 UWL Science Career Forum	4 Kid's Ice Fishing Day
5 Midwest Fish and Wildlife Conference-Lincoln, Nebraska	6 Midcontinent Warm Water Fish Culture Workshop	7 Bloater spawning	8	9	10 La Crosse Boat/RV Show	11
12 La Crosse Boat RV Show	13	14 Valentine's Day	15 MARS (mussel) webinar	16	17	18
19	20 President's Day	21	22	23	24	25
26 NCTC Fisheries Academy –Orey Stepping Up to Leadership Training-Angie	27	28				